U.S. Department of Energy

SBIR/STTR Program Overview

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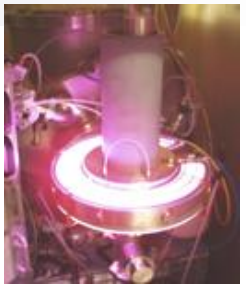
SBIR/STTR Supporting the Department of Energy's Primary Missions

1. Advancing the Nation's Economic and Energy Security
2. Promoting Scientific and Technological Innovation
3. Ensuring the Environmental Clean-Up of the National Nuclear Weapons Complex

DOE's SBIR/STTR Program Features

- SBIR/STTR is a Grants Driven Program
- Electronic Applications Accepted Only via (www.Grants.gov)
- Annual Solicitation for Phase I (fall) & Phase II (spring)
- $100K Phase I (9 months) – Feasibility
- $750K Phase II (24 months) – Development
- Must Be Awarded DOE Phase I to Compete in Phase II
- SBIR: PI must be Employed by the Small Business
- STTR: PI may be Employed by Either the Small Business or Research Partner
- Offer Commercialization Assistance Support

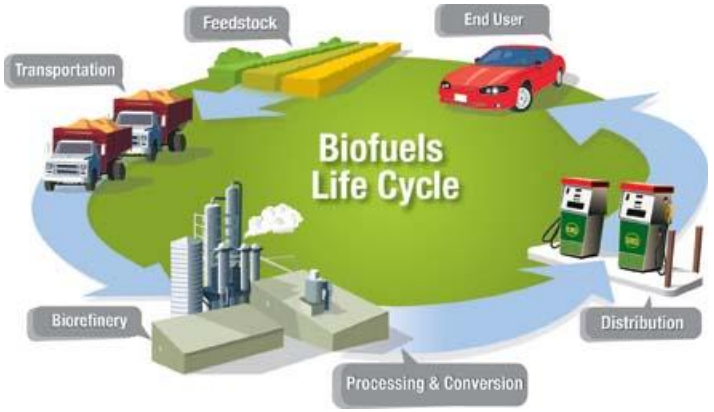
The Department of Energy's SBIR/STTR Funding Programs



- **12 SBIR/STTR Funding Programs**
  - **66 R&D Topics (Proportional to Program R&D Budget)**
    - **276 Mission-Specific R&D Subtopics**

1. Advanced Scientific Computing Research
2. Basic Energy Sciences
3. Biological & Environmental Research
4. Electricity Delivery/Reliability
5. Energy Efficiency and Renewable Energy
6. Environmental Management
7. Fossil Energy
8. Fusion Energy Sciences
9. High Energy and Nuclear Physics
10. National Security
11. Nuclear Energy S&T
12. Science: Data Management & Communication

DOE's Most Popular SBIR/STTR Funding Program



Energy Efficiency & Renewable Energy: 16 Technical Topics (over 400 proposals in 2008)

1. Energy Savings Technologies for Commodity Manufacturing Industries
2. Increasing Efficiency in Traditional Lighting Technologies
3. Production of Biofuels from Biomass
3. Advanced Water Power Technology Development
4. Wind Energy Technology Development
5. Geothermal Technologies
6. Hydrogen, Fuel Cells, & Infrastructure Technologies
7. Solar Energy
9. Solid State Lighting
10. Improved Motor Designs & Power
11. Electronics Advancements for Hybrid & Plug-in Hybrid Electric Vehicles
12. Advanced Materials & Technologies for Cooling & Waste Heat Recovery
13. Energy Efficient Membranes Catalysis
14. Advanced Battery Electrode Development
15. Nanotechnology
16. Energy Storage Technologies for Hybrid & Plug-in Hybrid Electric Vehicles

Finding SBIR/STTR Topic 18 . . .

"2009 Technical Topic Descriptions"

Table of Contents

2009
U.S. Department of Energy
Small Business Innovation
Research
And
Small Business Technology
Transfer Programs

Technical Topic Descriptions

Finding SBIR/STTR Topic 18 . . .

"2009 Technical Topic Descriptions"

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Topic 18. PRODUCTION OF BIOFUELS FROM BIOMASS

Subtopic a. *Biomass Moisture Management and Material Stabilization*

Subtopic b. *Microalgal Feedstock Production*

Subtopic c. *Small-Scale Transportable Biomass Pyrolysis Technology*

Subtopic d. *Biomass Densification*

2009 Phase I Technical Topic Descriptions (pg. 65)

d. Biomass Densification—Two major characteristics of a raw biomass, its highly variable moisture and its bulkiness . . .

Grant applications are sought to develop an economical process . . .

Questions-contact Sam Tagore Sam.Tagore@hq.doe.gov

DOE's Average Annual SBIR/STTR Award Statistics

	Proposals Rec'dvs.	Awards Made
Phase I:	**~1,500**	**~330 @ ~$100K**
Phase II:	**~260**	**~125 @ ~$750K**

Phase I: Applicant has a **20%** Chance of Award

Phase II: Applicant has a **50%** Chance of Award

DOE SBIR/STTR Evaluation Process

EXTERNAL PEER REVIEW: Reviewers are asked to provide comments with respect to Three Evaluation Criteria – all of which receive equal weight

1. Scientific/Technical Approach
   - Is it a Good Idea?
2. Ability to Carry Out the Project
   - PI/Research Team, Facilities, “Infrastructure”
3. Impact
   - Will it Make a Difference?

DOE's SBIR Program Assists Small Business Commercialization

- **Trailblazer™ Assessments** (Initiated early in Phase I Award)
  - Identifies major market niches for commercialization
  - Develops a value for the technology
  - Identifies commercialization vehicles & maps-out market path

- **Technology Niche Analysis™ (**Initiated mid-Phase II)
  - Assesses potential applications for an innovation or technology
  - Individualized market entry strategy & launch tactics

- **Commercialization Opportunity Forum Program**
  - Provides comprehensive strategic planning & business research
  - Intensive 20 week program culminating with focused business outreach

The Department of Energy's SBIR/STTR Solicitation Schedule

Annual Solicitation	*Phase I*	*Phase II*
Release Date:	September	February
Closing Date:	November	April
Award Selections:	May	June
Grants Begin:	June	July

Key Resource and Contact Information

- DOE SBIR/STTR Web Site: www.science.doe.gov/sbir
- 2009 SBIR/STTR Phase I Technical Topic Descriptions: http://www.science.doe.gov/sbir/solicitations/FY%202009/Table_of_contents_sub.htm
- 2009 DOE Phase I Funding Opportunity Announcement http://www.science.doe.gov/sbir/solicitations/FY%202009/C27_Notice.htm
- SBIR/STTR E-Mail Support: sbir-sttr@science.doe.gov

Key Program Resource and Contact Information

- DOE's Mission, Priorities, and Strategic Plan: http://www.energy.gov/about/strategicplan.htm
- DOE's R&D Budget and Narrative Description: http://www.mbe.doe.gov/crOrg/cf30.htm
- SBIR/STTR Technical Program Support: (301) 903-1414
- SBIR/STTR Hotline & General Inquiries: (301) 903-5707